Approval Package for:

Application Number: 088633

Trade Name: AMITRIPTYLINE HCL 75MG TABLETS

Generic Name: Amitriptyline HCL 75mg Tablets

Sponsor: Danbury Pharmacal, Inc.

Approval Date: March 2, 1984

APPLICATION 088633

CONTENTS

	Included	Pending	Not	Not
		Completion	Prepared	Required
Approval Letter	X			
Tenative Approval Letter				
Approvable Letter				
Final Printed Labeling	X			
Medical Review(s)				
Chemistry Review(s)	X			
EA/FONSI				
Pharmacology Review(s)				· -
Statistical Review(s)				
Microbiology Review(s)				
Clinical Pharmacology				
Biopharmaceutics Review(s)				
Bioequivalence Review(s)				X
Administrative Document(s)	X			
Correspondence				

A	D]	plication	Number	088633	
	-				

APPROVAL LETTER

NDA 88-633

3/2/84

Danbury Pharmacal, Inc. Attention: Nessim Maleh 131 West Street, P.O. Box 296 Danbury, CT 06810

Gentlemen:

Reference is made to your abbreviated new drug application dated December 9, 1983, submitted pursuant to Section 505(b) of the Federal Food, Drug, and Cosmetic Act for Amitriptyline Hydrochloride Tablets, 75 mg.

Reference is also made to our letter dated January 27, 1984 and your response dated February 22, 1984 enclosing final printed labeling and additional information.

The application provides for you to repackage the drug product filed by (h)4 - Confidential Rusiness

We have completed the review of this abbreviated new drug application and have concluded that the drug is safe and effective for use as recommended in the submitted labeling. Accordingly, the application is approved.

Any significant change in the conditions outlined in this abbreviated new drug application requires an approved supplemental application before the change may be made, except for changes made in conformance with other provisions of Section 314.8 of the new drug regulations.

This Administration should be advised of any change in the marketing status of this drug.

For Initial Campaigns: We request that you submit, in duplicate, any proposed advertising or promotional copy which you intend to use in your immediate advertising or promotional campaigns. Please submit all proposed materials in draft or mock-up form, not final print. Submit both copies together with a copy of the proposed or final printed labeling to the Division of Drug Advertising and Labeling (HFN-240). Also, please do not use Form FD-2253 for this submission.

For Subsequent Campaigns: He call your attention to Regulation 21 CFR 310.300 (b)(3) which requires that material for any subsequent advertising or promotional campaigns, at the time of their initial use, be submitted to our Division of Drug Advertising and Labeling (HFN-240) with a completed Form FD-2253. A copy of Form FD-2253 is enclosed for vour convenience.

The enclosures summarize the conditions relating to the approval of this

application.

incerely your

Birector

Division of Generic Drugs

Office of Drug Standards

National Center for Drugs and Biologics

Conditions of Approval of a New Drug Application Records & Reports Requirements

Form FD 2253

cc: BOS-DO

HFN-530

HFN-5

HFN-313

HFN-616

KJohnson/JMeyer/CSmith R/D INITIAL JMeyer mm:3/1/84 (0798A)

Approved CM. Smith 3-1-84

APPLICATION NUMBER 088633

CHEMISTRY REVIEW(S)

3. NAME AND ADDRESS OF APPLICANT	(Repackage	(m)			
Danbury Pharmacal Danbury, CT 06810	(Nepackage	:1 <i>)</i>	•	S. SUPPLI	
				NUMBER(S)	
G. NAME OF DRUG	7. NONP	ROPRIETARY NAI	(E	i	
. Amitriptyline hydrochlori	de				
8. SUPPLEMENT(S) PROVIDES FOR:		······································			~~.
				S. AMENDMEN	ITS A
		•		(Reports, at	اه زه
		•	•		
THE PROPERTY OF THE PROPERTY O		11. HOW DISPEN	SED	12. RELATED II	к о/ н
19. PHARMACOLOGICAL CATEGORY				05.07.57	ma m a
antidepressant		XX RX	□ o⊤c	86-86 <i>0</i> (mant rer
13. DOSAGE FORM (S) Tablet	14.POTE	NCY (100)	•		
•		75 mg.			
15. CHEMICAL NAME AND STRUCTURE				16. RECORDS	AND
	•			YES	(
				REVIEWED	
Applicant satisfies r	requirement	cs as a repad	ckager, man	□ ves	
Applicant satisfies r (b)4 - Confid	requirement dential	cs as a repac	kager, manu	□ ves	
Applicant satifies r (b)4 - Confid	requirement dential	s as a repac	ckager, man	□ ves	
Applicant satisfies results (b)4 - Confident c	requirement dential	cs as a repac	kager, man	□ ves	
Applicant satifies r (b)4 - Confic	requirement dential	s as a repac	kager, man	□ ves	
Applicant satisfies r (b)4 - Confic	requirement dential	cs as a repac	kager, man	□ ves	
Applicant satisfies results (b)4 - Confic	requirement dential	s as a repac	kager, man	□ ves	
Applicant satisfies rule (b)4 - Confic	requirement dential	as a repac	kager, man	□ ves	
Applicant satisfies results (b)4 - Conficer	requirement dential	s as a repa	kager, man	□ ves	
Applicant satisfies response (b)4 - Confidential (b)4 - Confidenti	requirement dential	s as a repac	kager, man	□ ves	
Applicant satisfies response to the second s				□ ves	
Applicant satifies responses to the confidence of the confidence o		appr		□ ves	
Applicant satifies responses to the confidence of the confidence o				□ ves	
Applicant satifies responses to the confidence of the confidence o				□ ves	
Applicant satifies responses to the confidence of the confidence o				□ ves	
Applicant satifies responses to the confidence of the confidence o				□ ves	
Applicant satifies responses to the confidence of the confidence o				□ ves	

Enter evaluation or comments for each item. If necessary, continue on 81 x 1014 paper. NDA HUMBER 88-633
Key continued. To from by manage. Enter tray or if no change or "NA" if not synticable 84-625
See NDA 86-860
26. FACILITIES AND PERSONNEL (84.b)
Satisfactory
27. SYNTHESIS (8C)
See NDA 86-860
28. RAW MATERIAL CONTROLS (8d,0) a. NEW DRUG SUBSTANCE
See NDA 86-86 U
b. OTHER INGREDIENTS
See NDA 86-860
29. OTHER FIRM(3) (81)
Manufacturer and applicant in compliance, memo dated 1/4/84L. Hartley
30. MANUFACTURING AND PROCESSING (38,h,1,k) See NDA
86-86 D
Glass and HDPE containers, all tested in accord with USP
32. PACKAGING AND LABELING (81,00) Satisfactory
33. LABORATORY CONTROLS (In-Process and Finished Dossage Form) (8n)
satisfactory
Protocol submitted, applicant will use 2 year expiry
35. CONTROL NUMBERS (8°) accounted for
36. SAMPLES AND RESULTS (9)
8. VALIDATION b, MARKET PACKAGE
37. LABELING (4) satisfactory per K Johnson
IB. ESTABLISHMENT INSPECTION
Applicant and manufacturer in compliance

CHEMIST'S REVIEW FOR REVIATED BEW DRUG APPLICATION	Statement Date:	NDA # 88 - 633
OR SUPPLEMENT		ORIGINAL XXXX
TE AND ADDRESS OF APPLICANT:	• .	ORIGINAL XXXX AMENDMENT
Danbury Pharmacal In		SUPPLEMENT
Danbury CT 06810		RESUBMISSION
		CORRESPONDENCE
RPOSE OF AMENDMENT/SUPPLEMENT	त	REPORT
		OTHER
•		DATE(s) of SUBMISSICH(s)
ARIMACOLOGICAL CATEGORY	NAME OF DRUG	12-9-83
		HOW DISPENSED
antidepressant	Amitriptyline Hydrochloride	VVVV
•		RX_XXX OTC
	POTENCY (IES)	RELATED IND/NDA/DMF
SASE FORM	1/	88-621 88-620
` Tablet .	15 mg	88-622 88-633 88-634 88-635
	SAMPLES	88-634 88-635° 86-857 86-859
TERILIZATIO:	SHIP EES	86-610 86-860
		86-854 86-853
· · ·		
To be revisedsee	medical officer's review	
ICLOSIC AVAILABILITY N. A.	applicant is repackager, manufac	cturer i (b)4 - Confidentia
STABLISHMENT INSPECTION		
	facturer in compliance	
COMPOSITION NO.	UFACTURING, CONTROLS factory, all USP testing for fina	a livet by
controls are satisf	factory, all USP testing for fina	product by
repackager reque	ested 	
ACKAGING Applicant to use g	lass and HDPE containers identical	to manufacturer
TABILITY:		
Protocol: same as manufac	turer	
Exp. Date: applicant requart applicant requ	ests 4 years, same as manufacturer uested to lower expiry to 2 years	, no data, denied.

REMARKS & CONCLUSION:

Revision requested in labeling 2 year expiry recommended
All compendium tests on final dosage form requested 医皮皮基膜及基础及
Description of container closure system and tests.

KMMXXXWXX non-approval CMSmith

APPLICATION NUMBER 088633

FINAL PRINTED LABELING

10 SEL

DESCRIPTION: Amitriptyline HCl, a dibenzocycloheptadiene derivative, is a white or practically white, crystalline compound that is freely soluble in water.

It is designated chemically as 10,11-dihydro-N,N-dimethyl-5H-dibenzo [a,d] cycloheptene- 4^3 -y -propylamine hydrochloride. The molecular weight is 313,87. The empirical formula is $\mathrm{C_{20}H_{23}N^{\circ}HCl}$, and the structural formula is:



MAR

2 1984

رار والرجام والأرار المختلط ووالرارا أكرين فوار بالملك

Amitriptyline inhibits the membrane, pump mechanism responsible for uptake of norepinephrine and serotonin in adrenergic and serotonergic neurons. Pharmacologically this action may potentiate or prolong neuronal activity since reuptake of these biogenic amines is important physiologically in terminating its transmitting activity. This interference with reuptake of norepinephrine and/or serotonin is believed by some to underlie the antidepressant activity of amitriptyline.

<u>INDICATIONS</u>: For the relief of symptoms of depression. Endogenous depression is more likely to be alleviated than are other depressive states.

CONTRAINDICATIONS: Amitriptyline HCl is contraindicated in patients who have shown prior hypersensitivity to it. It should not be given concomitantly with monoamine oxidase inhibitors. Hyperpyretic crises, severe convulsions, and deaths have occurred in patients receiving tricyclic antidepressants and monoamine oxidase inhibiting drugs simultaneously. When it is desired to replace a monoamine oxidase inhibitor with amitriptyline, a minimum of 14 days should be allowed to elapse after the former is discontinued. Amitriptyline HCl should then be initiated cautiously with gradual increase in dosage until optimum response is achieved.

This drug is not recommended for use during the acute recovery phase following myocardial infarction.

<u>WARNINGS</u>: Amitriptyline HC1 may block the antihypertensive action of guanethidine or similarly acting compounds.

It should be used with caution in patients with a history of seizures and, because of its atropine-like action, in patients with a history of urinary retention, angle-closure glaucoma, or increased intraocular pressure. In patients with angle-closure glaucoma, even average doses may precipitate an attack.

Patients with cardiovascular disorders should be watched closely. Tricyclic antidepressant drugs, including amitriptyline, particularly when given in high doses, have been reported to produce arrhythmias, sinus tachycardia, and prolongation of the conduction time. Myocardial infarction and stroke have been reported with drugs of this class.

Close supervision is required when a mitriptyline is given to hyperthyroid patients or those receiving thyroid medication.

This drug may impair mental and/or physical abilities required for performance of hazardous tasks, such as operating machinery or driving a motor vehicle.

Amitriptyline may enhance the response to alcohol and the effects of barbiturates and other CNS depressants. In patients who may use alcohol excessively, it should be borne in mind that the potentiation may increase the danger inherent ir. any suicide attempt or overdosage. Delerium has been reported with concurrent administration of amitriptyline and disulfiram.

Usage in Pregnancy: Safe use of amitriptyline during pregnancy and lactation has not been established; therefore, in administering the drug to pregnant patients, nursing mothers, or women who may become pregnant, the possible benefits must be weighed against the possible hazards to mother and child.

Animal reproduction studies have been inconclusive and clinical experience has been limited.

<u>Usage in Children:</u> In view of the lack of experience in children, the drug is not recommended at the present time for patients under 12 years of age.

<u>PRECAUTIONS</u>: Schizophrenic patients may develop increased symptoms of psychosis; patients with paranoid symptomatology may have an exaggeration of such symptoms; manic depressive patients may experience a shift to mania or hypomania.

In these circumstances the dose of amitripytline may be reduced or a major tranquilizer such as perphenazine may be administered concurrently.

When this drug is given with anticholinergic agents or sympathomimetic drugs, including epinephrine combined with local anesthetics, close supervision and careful adjustment of dosages are required.

Paralytic ileus may occur in patients taking tricyclic antidepressants in combination with anticholinergic-type drugs.

Caution is advised if patients receive large doses of ethchlorvynol concurrently. Transient delirium has been reported in patients who were treated with one gram of ethchlorvynol and 75-150 mg. of amitriptyline.

The possibility of suicide in depressed patients remains until significant remission occurs. Potentially suicidal patients should not have access to large quantities of this drug. Prescriptions should be written for the smallest amount feasible.

Concurrent administration of amitrictyline and electroshock therapy may increase the hazards associated with such therapy. Such treatment should be limited to patients for whom it is essential.

Discontinue the drug several days before elective surgery if possible.

Both elevation and lowering of blocd sugar levels have been reported.

Amitriptyline should be used with caution in patients with impaired liver function.

ADVERSE REACTIONS: Note - Included in the listing which follows are a few adverse reactions which have not been reported with this specific drug. However, pharmacological similarities among the tricyclic antidepressant drugs require that each of the reactions be considered when amitriptyline is administered.

a Reminiourative of primarrailly appring comboning

It should be used with caution in patients with a history of seizures and, because of its atropine-like action, in patients with a history of urinary retention, angle-closure glaucoma, or increased intraocular pressure. In patients with angle-closure glaucoma, even average doses may precipitate an attack.

Patients with cardiovascular disorders should be watched closely. Tricyclic antidepressant drugs, including amitriptyline, particularly when given in high dosses, have been reported to produce arrhythmias, sinus tachycardia, and prolongation of the conduction time. Myocardial infarction and stroke have been reported with drugs of this class.

Close supervision is required when amitriptyline is given to hyperthyroid patients or those receiving thyroid medication.

This drug may impair mental and/or physical abilities required for performance of hazardous tasks, such as operating machinery or driving a motor vehicle.

Amitriptyline may enhance the response to alcohol and the effects of barbiturates and other CNS depressants. In patients who may use alcohol excessively, it should be borne in mind that the potentiation may increase the danger inherent in any suicide attempt or overdosage. Delerium has been reported with concurrent administration of amitriptyline and disulfiram.

Usage in Pregnancy: Safe use of amitriptyline during pregnancy and lactation has not been established; therefore, in administering the drug to pregnant patients, nursing mothers, or women who may become pregnant, the possible benefits must be weighed against the possible hazards to mother and child.

Animal reproduction studies have been inconclusive and clinical experience has been limited.

 $\underline{\text{Usage in Children}}\colon$ In view of the lack of experience in children, the drug is not recommended at the present time for patients under 12 years of age.

<u>PRECAUTIONS</u>: Schizophrenic patients may develop increased symptoms of psychosis; patients with paranoid symptomatology may have an exaggeration of such symptoms; manic depressive patients may experience a shift to mania or hypomania.

In these circumstances the dose of amitripytline may be reduced or a major tranquilizer such as perphenazine may be administered concurrently.

When this drug is given with anticholinergic agents or sympathomimetic drugs, including epinephrine combined with local anesthetics, close supervision and careful adjustment of dosages are required.

Paralytic ileus may occur in patients taking tricyclic antidepressants in combination with anticholinergic-type drugs.

Caution is advised if patients receive large doses of ethchlorwynol concurrently. Transient delirium has been reported in patients who were treated with one gram of ethchlorwynol and 75-150 mg. of amitriptyllne.

The possibility of suicide in depressed patients remains until significant remission occurs. Potentially suicidal patients should not have access to large quantities of this drug. Prescriptions should be written for the smallest amount feasible.

Concurrent administration of amitriptyline and electroshock therapy may increase the hazards associated with such therapy. Such treatment should be limited to patients for whom it is essential.

Discontinue the drug several days before elective surgery if possible.

Both elevation and lowering of blood sugar levels have been reported.

Amitriptyline should be used with caution in patients with impaired liver function.

ADVERSE REACTIONS: Note - Included in the listing which follows are a few adverse reactions which have not been reported with this specific drug. However, pharmacological similarities among the tricyclic antidepressant drugs require that each of the reactions be considered when amitriptyline is administered.

Cardiovascular: Hypotension, hypertension, tachycardia, palpitation, myocardial infarction, arrhythmias, heart block, stroke.

CNS and Neuromuscular: Confusional states; disturbed concentration; discrientation; delusions; hallucinations; excitement; anxiety; restlessness; insomnia; nightmares; numbness, tingling, and paresthesias of the extremities; peripheral neuropathy; incoordination; ataxia; tremors; selzures; alteration in EEG patterns; extrapyramidal symptoms; tinnitus; syndrome of inappropriate ADH (antidiureto hormone) secretion.

Anticholinergic: Dry mouth, blurred vision, disturbance of accommodation increased intraocular pressure, constipation, paralytic ileus, urinary retention, dilation of urinary tract.

Allergic: Skin rash, urticaria, photo-sensitization, edema of face and tongue.

Hematologic: Bone marrow depression including agranulocytosis, leukopenia, eosinophilia, purpura, thrombocytopenia.

ericania de la composition della composition del

يرودون والماووروان وحفدوس العصاب ببيعاسه

Gastrointestinal: Nausea, epigastric distress, vomiting, anorexia, stomatitis, peculiar taste, diarrhea, parotid swelling, black tongue Rarely hepatitis (including altered liver function and jaundice).

Endocrine: Testicular swelling and gynecomastia in the male, breast enlargement and galactorrhea in the female, increased or decreased libido, elevation and lowering of blood sugar levels.

Other: Dizziness, weakness, fatigue, headache, weight gain or loss, increased perspiration, urinary frequency, mydriasis, drowsiness.

Withdrawal Symptoms: Abrupt cessation of treatment after prolonged administration may produce nausea, headache, and malaise. Gradual dosage reduction has been reported to produce, within two weeks, transient symptoms including irritability, restlessness, and dream and sleep disturbance. These symptoms are not indicative of addiction. Rare instances have been reported of mania or hypomania occurring within 2-7 days following cessation of chronic therapy with tricyclic antidepressants.

DOSAGE AND ADMINISTRATION: Oral Dosage - Dosage should be initiated at a low level and increased gradually, noting carefully the clinical response and any evidence of intolerance.

Initial Dosage for Adults - Twenty-five mg. three times a day usually is satisfactory for outpatients. If necessary this may be increased to a total of 150 mg. a day. Increases are made preferably in the late afternoon and/or bedtime doses. A sedative effect may be apparent before the antidepressant effect is noted, but an adequate therapeutic effect may take as long as 30 days to develop.

An alternate method of initiating therapy in outpatients is to begin with 50 to 100 mg. amitriptyline HCl at bedtime. This may be increased by 25 to 50 mg. as necessary in the bedtime dose to a total of 150 mg. per day.

Hospitalized patients may require 100 mg, a day initially. This can be increased gradually to 200 mg, a day if necessary. A small number of hospitalized patients may need as much as 300 mg, a day.

Adolescent and Elderly Patients - In general, lower dosages are recommended for these patients. Ten mg. three times a day with 20 mg. at bedtime may be satisfactory in adolescent and elderly patients who do not tolerate higher dosages.

Maintenance: The usual maintenance dosage of amitriptyline HCl is 50 to 100 mg. per day. In some patients 40 mg. per day is sufficient. For maintenance therapy the total daily dosage may be given in a single dose preferably at bedtime. When satisfactory improvement has been reached, dosage should be reduced to the lowest amount that Will maintain relief of symptoms. It is appropriate to continue maintenance therapy 3 months or longer to lessen the possibility of relapse.

Usage in Children - In view of the lack of experience in children, this drug is not recommended at the present time for patients under 12 years of age.

Plasma levels: Because of the wide variation in the absorption and distribution of tricyclic antidepressants in body fluids, it is difficult to directly correlate plasma levels and therapeutic effect. However, determination of plasma levels may be useful in identifying patients who appear to have toxic effects and may have excessively high levels, or those in whom lack of absorption or noncompliance is suspected. Adjustments in dosage should be made according to the patient's clinical response and not on the basis of plasma levels.

OVERDOSAGE: Manifestations - High doses may cause temporary confusion, distrubed concentration, or transient visual hallucinations. Overdosage may cause drowsiness; hypothermia; tachycardia and other arrhythmia abnormalities, such as bundle branch block; EGG evidence of impaired conduction; congestive heart failure; dilated pupils; convulsions; severe hypotension; stupor; and coma. Other symptoms may be agitation, hyperactive reflexes, muscle rigidity, vomitting, hyperpyrexia, or any of those listed under ADVERSE REACTIONS.

All patients suspected of having taken an overdosage should be admitted to a hospital as soon as possible. Treatment is symptomatic and supportive. Empty the stomach as Galickly as possible by emestis followed by gastric lavage upon arrival at the hospital. Following gastric lavage, activated charcoal may be administered. Twenty to 30 g. of activated charcoal may be given every four to six hours during the first 24 to 48 hours after injection. An ECG should be taken and close monitoring of cardiac function instituted if there is any sign of abnormality. Maintain an open airway and adequate fluid intake; regulate body temperature.

The intravenous administration of 1-3 mg. of physostigmine salicylate has been reported to reverse the symptoms of tricyclic antidepressant poisoning. Because physostigmine is rapidly metabolized, the dosage of physostigmine should be repeated as required particularly if life threatening signs such as arrhythmias, convulsions, and deep coma recur or persist after the initial dosage of physostigmine. Secause physostigmine itself may be toxic, it is not recommended for routine use.

Standard measures should be used to marage circulatory shock and metabolic acidosts. Cardiac arrhythmias may be treated with neostigmine, pyridostigmine, or propragator. Should cardiac failure occur, the use of digitalis should be considered. Close monitoring of cardiac function for not less than five days is advisable. Anticonvulsants may be given to control convulsions. Amtriphyline increases the CNS depressor action, but not the anticonvulsant action of barbiturates; therefore, an inhalation anesthetic, diazepam, or paraldehyde is recommended for control of convulsions.

Dialysis is of no value because of low plasma concentrations of the drug.

Since overdosage is often deliberate, ratients may attempt suicide by other means during the recovery phase.

Deaths by deliberate or accidental overdesage have occurred with this class of drugs.

HOW SUPPLIED:

A Property of the Party of the

Amitriptyline Hydrochloride Tablets are supplied in the following strengths and sizes:

10 mg. tablets, pink, film-coated, round, convex in bottles of 100, 1000, and 5000.

25~mg. tablets, green, film-coated, round, convex in bottles of 100, 1000 and 5000.

50 mg. tablets, brown, film-coated, round, convex in bottles of 100, 1000 and 5000.

75 mg. tablets, purple, film-coated, round, convex in bottles of 100, 1000 and 5000.

100 mg. tablets, orange, film-coated, round, convex in bottles of 100, 1000 and 5000.

.000 and 5000.

150 mg. tablets, green, film-coated, round, convex in bottles of 100, 1000 and 5000.

Dispense in well-closed, light-resistant containers as defined in the USP.

Plasma levels: Because of the wide variation in the absorption and distribution of tricyclic antidepressants in body fluids, it is difficult to directly correlate plasma levels and therapeutic effect. However, determination of plasma levels may be useful in identifying patients who appear to have toxic effects and may have excessively high levels, or those in whom lack of absorption or noncompliance is suspected. Adjustments in dosage should be made according to the patient's clinical response and not on the basis of plasma levels.

OVERDOSAGE: Manifestations - High doses may cause temporary confusion, distrubed concentration, or translent visual hallucinations. Overdosage may cause drowsiness; hypothermia; tachycardia and other arrhythmic abnormalities, such as bundle branch block; ECG evidence of impaired conduction; congestive heart failure; dilated pupils; convulsions; severe hypotension; stupor; and coma. Other symptoms may be agitation, hyperactive reflexes, muscle rigidity, vomiting, hyperpyrexia, or any of those listed under ADVERSE REACTIONS.

All patients suspected of having taken an overdosage should be admitted to a hospital as soon as possible. Treatment is symptomatic and supportive. Empty the stomach as quickly as possible by emesis followed by gastric lavage upon arrival at the hospital. Following gastric lavage, activated charcoal may be administered. Twenty to 30 g. of activated charcoal may be given every four to six hours during the first 24 to 48 hours after ingestion. An ECG should be taken and close monitoring of cardiac function instituted if there is any sign of abnormality. Maintain an open airway and adequate fluid intake; regulate body temperature.

Farming Commence and Commence a

The intravenous administration of 1-3 mg. of physostigmine salicylate has been reported to reverse the symptoms of tricyclic antidepressant poisoning. Because physostigmine is rapidly metabolized, the dosage of physostigmine should be repeated as required particularly if life threatening signs such as arrhythmias, convulsions, and deep coma recur or persist after the initial dosage of physostigmine. Because physostigmine itself may be toxic, it is not recommended for routine use.

Standard measures should be used to manage circulatory shock and metabolic acidosis. Cardiac arrhythmias may be treated with neostigmine, pyridostigmine, or prepranolo). Should cardiac failure occur, the use of digitalis should be considered. Close monitoring of cardiac function for not less than five days is advisable. Anticonvulsants may be given to control convulsions. Amitriptyline increases the CNS depressant action, but not the anticonvulsant action of barbiturates; therefore, an inhalation anesthetic, diazepam, or paraldehyde is recommended for control of convulsions.

Dialysis is of no value because of low plasma concentrations of the $\ensuremath{\operatorname{drug}}$.

Since overdosage is often deliberate, patients may attempt suicide by other means during the recovery phase.

Deaths by deliberate or accidental overdosage have occurred with this class of drugs.

HOW SUPPLIED:

Amitriptyline Hydrochloride Tablets are supplied in the following strengths and sizes:

10 mg. tablets, pink, film-coated, round, convex in bottles of 100, 1000, and 5000.

 $25~\mathrm{mg}.$ tablets, green, film-coated, round, convex in bottles of 100, 1000 and 5000.

 $50~\mathrm{mg}.$ tablets, brown, film-coated, round, convex in bottles of 100, 1000 and 5000.

75~mg. tablets, purple, film-coated, round, convex in bottles of 100, 1000 and 5000.

 $100\ \text{mg.}$ tablets, orange, film-coated, round, convex in bottles of 100, 1000 and 5000.

150 mg. tablets, green, film-coated, round, convex in bottles of 100, 1000 and 5000.

Dispense in well-closed, light-resistant containers as defined in the USP.

CAUTION: Federal law prohibits dispensing without prescription.

Manufactured by:
IKAPHARM, LTD
Kfar Saba, Israel
Distributed by:
DANBURY PHARMACAL, INC.
Danbury, Connecticut 06810, USA

Revised: February, 1984 5456, 5457, 5458, 5459, 5558, 5559

APPLICATION NUMBER 088633

ADMINISTRATIVE DOCUMENTS

NDA 88-633

Danbury Pharmacal, Inc. Attention: Nessim Maleh 131 West Street P.O. Box 296 Danbury, CT 06810

Gentlemen:

Please refer to your abbreviated new drug application dated December 9, 1983 submitted pursuant to Section 505(b) of the Federal Food, Drug, and Cosmetic Act for the preparation Amitriptyline Hydrochloride Tablets. USP, 75 mg.

The application provides for you to repackage the drug product filed by (b)4 - Confidential Business

The application is deficient and therefore not approvable under Section 505(b) of the Act as follows:

It fails to provide adequate information in the labeling. We recommend the following:

Revise the package insert in accord with the accompanying labeling guideline.

In addition, delete the "a" from the Federal Caution statement that appears at the bottom of the insert.

Also provide for the name and place of business of the manufacturer and/or distributor.

At the time of the next printing, consider printing the strength of product in bolder print on the container label since it appears on the same line as "USP."

- It fails to assure that the dosage form has the proper identity, quality, purity and strength. We recommend that you conduct all compendial tests and specifications on the drug product.
- 3. It fails to include a description and tests that you use for your container/closure system.

- 4. It fails to include an expiration dating based upon stability data for the drug product when packaged in your container/closure system. In lieu of this data, we recommend that you use a tentative 2 year expiration dating.
- 5. It fails to include a properly executed Form FDA 356H. (Check the block marked Abbreviated application.)

The file is now closed. If you wish to reopen it, the submission should be in the form of an amendment to this application, adequately organized, which represents the information necessary to remove all deficiencies we have outlined. For those deficiencies related to package insert labeling, we suggest that you incorporate the suggestions noted, then prepare and submit draft copy for our review and comment.

If you do not agree with our conclusions, you may make a written request to file the application over protest, as authorized by 21 CFR 314.110(d). If you do so, the application shall be re-evaluated and within 90 days of the date of receipt of such request (or additional period as we may agree upon), the application shall be approved or you shall be given a written notice of opportunity for a hearing on the question of whether the application is approvable.

Markey To

ncerely your

Director

Division of Generic Drugs Office of Drug Standards

National Center for Drugs and Biologics

Enclosure: Labeling Guidelines

cc: BOS-DO HFN-530

KJohnson/JMeyer/CSmith
R/D INITIAL JMeyer/MSeife
mm:1/26/84 (4706c)
Not Approvable Summer (126/84)

Cm. Simith 1-26-84

REVIEW OF PROFESSIONAL LABELING

ANDA - FPL

DATE OF REVIEW: 1-9-84

ANDA #: 88-633 (75 mg)

88-634 (100 mg)

88-635 (150 mg)

NAME OF FIRM: Danbury

NAME OF DRUG: Generic: Amitriptyline Hydrochloride Tablets

DATE OF SUBMISSION: 12-9-83

COMMENTS:

Container: Satisfactory (100s, 1000s, 5000s)

However, we encourage the firm to consider placing USP on the line above the strength.

Insert: Not satisfactory

- a) Must revise as per our current Guideline
- b) CAUTION: Delete "a"
- c) Also, must add name and place of business of the manufacturer and/or distributor.
- d) The HOW SUPPLIED section must include only those strengths and containers which are approved.

RECOMMENDATIONS:

- 1. Inform firm of the above comment relating to labels.
- 2. Send current Labeling Guideline.
- Request that the firm prepare and submit revised insert labeling.
- 4. The "How Supplied" section must include only those strengths and containers which are approved.

Kent T. Johnson

cc: dup KTJ/c1/1-9-84 NDA 89-533

Danbury Pharmacal, Inc. Attention: Nessim Maleh 131 West Street P. O. Box 295 Danbury, CT 06810

Gentlemen:

We acknowledge the receipt of your abbreviated new drug application submitted pursuant to Section 505(b) of the Federal Food, Drug, and Cosmetic Act for the following:

NAME OF DRUG: Amitriptyline Hydrochloride Tablets, USP 75 mg

DATE OF APPLICATION: December 9, 1983

DATE OF RECEIPT: January 3, 1984

We will correspond with you further after we have had the opportunity to review the application.

Please identify any communications concerning this application with the

NDA number shown above.

Maryth_Selfe,/M.

Sinderlely yours

Director

Division of Generic Drugs Office of Drug Standards

National Center for Drugs and Biologics

BOS-DO DUP HFN-530 JLMeyer/m1b/1-4-83

ack



Memorandum

TO	:Manufacturing Review Branch (HFN-32 Division of Drug Quality Compliance		12-28-83	
FROM	:Division of Generice Drugs			
	Requester's Name David Nos	ken .	PHONE:	443-4080
Subje	ECT: ESTABLISHMENT EVALUATION REQUEST		•	
	ANDA, AND SUPPLEMENT NUMBER:	(10 mg) . 83-621	L (25 :xi) ,	38 -622 (50 tegt)
	TRADE MARK (if any)			
	NONPROPRIETARY NAME: Amitriptyline H	Cl Tablets		
DOSAGI	GE FORM AND STRENGTH(S): 1004			
	CLASSIFICATION: (Priority) A or B 1C_	Other	PROFILE	CLASS CODE:
APPLIC ADDRES	CANT'S NAME: Danbury Pharmacal, I SS: 131 West Street, P.O. Ed Eur	nc. 296, January,	Cr 06910	:
FACIL	ITIES TO BE EVALUATED: (Name, Full Add	ress, DMF# (if	any), and	Responsibility
1. ap	plicant repackager USING			
	(b)4 - Confidential			
	approval of 86-610(10 mg)		1 0	
•	86-859 (25 mg)			1
	86-85 7 (5 0 mg)		ļ.	
Commen	nts: () See Attached, oc () Actual on-site inspection		-503 12-8	7
Reason	n:			
- 2 ₩ -			,	
FOR HF	FN-322 USE ONLY:		********	*********
Reques	st Rec'd:Insp	pection Request	ed;	
		if applicable)		
	s) are in Compliance With GMPs: for Decision:			<u> </u>
Review	wing CSO:	Concurrance:		
ea: H	HPN -		•	

PORM FDA 3274 (1/83)

· ·		NDA NUMBER	
HOTOS OF AF ROYAL		86 - CA	55
NEW DRUG APPLICATION OR SUPPLEMEN		DAYE APAROVAL LEY	TER ISSUEE
The total of the transfer of the transfer	• •		
TO:	FROM:	l	-/-
		Bureau of Drugs	
Press Relations Staff (HFI-40)	LAI.	Idland of Dings	
	<u></u>	Bureau of Veterinary Me	adinina
A Morro		oureau of veterinary me	acine
Forward original of this form for publication only	NTION	han been leaved and Al	dak
approval has been entered above.	itter approvar tetter	nas peen issued and th	ie date of
TYPE OF APPLICATION		CATEGORY	
ORIGINAL NDA SUPPLEMENT ABBREVIATED	SUPPLEMENT		
TRADE NAME (or other designated name) AND ESTABLISHED OR N	TO ANDA	AME (II ADV) DE DRUG	VETERINARY
1	•	HWE AN BUILDED BUILD	
Amitriptyline Hydrochloride			
Onionar	In market en e e	HOW DISPENSED	
ACTIVE INGREDIENT(S) (as declared on label. List by established	ROFWATER	X RX	OTC
declared on label.)	AL-Wood back of difficulty on	e(s) and include amount(), il amount is
· ·	1		
amitriptyline Hydrochloride,	15 mg.		
	σ		
•			
		,	
NAME OF APPLICANT (Include City and State)			
Danbury Pharmacal, Inc (Repackager)			
Danbury, CT 06810		•	
PRINCIPAL INDICATION OR PHARMACOLOGICAL CATEGORY			
Antidepressant			
		المستعر ومستور	
COMPLETE FOR V	ETERNARY AND V		
ANIMAL SPECIES FOR WHICH APPROVED	LIERINAKI UNLY		
WINNE SEEGIES FOR HUICH MERKOACH			
AAURI Rec -AA 1	10 M H H 10 M 10 M		
COMPLETE FOR SU CHANGE APPROVED TO PROVIDE FOR	IFFLEMENT ONLY		
CHANGE AFFROVED TO PROVIDE FOR		•	Ì
·			
-3-			
		•	1
FORM PRE	ARED BY		
NAME /		DATE 5 / C	11
CM Smith ("/1) Cmill		3-1-8	7
) FORM APP	ROVED BY		,
NAME		DATE	
J L Meyer			